

**A) Remarks:**

Claims 1 - 2, 5 - 6, 8, 10 - 11, 14 - 15 and 17, have been rejected under 35 U.S.C. 102(b) as being anticipated by Beer et al. Reconsideration is respectfully requested.

In making the rejection the Examiner states that the reference defines a device “wherein the springs are capable of providing a continuous compressions as they are attached to the plates”. It is respectfully submitted that this statement is not accurate.

In this regard, it must be understood that the Beer et al. device is a prosthesis. It is intended in and of itself to fully substitute for a removed natural disc and cannot, and is not intended to apply continuous compression to a “bone graph” implanted between vertebra.

The Examiner points out that the springs of the reference are firmly attached to the upper and lower plates and therefore they can be placed in compression or tension. This is done so whereby the prosthetic device can act in full substitution of an original removed natural disc. The Examiner goes on to say that “The device is capable of providing loading on graph material (12) disposed between vertebral elements.” This statement is once again inaccurate.

The material 12 is a polymeric core which is merely part and parcel of the Beer et al. prosthetic device which is not used to place loading on a bone graph between vertebral elements, but in fact is provided in substitution of any such bone graph or natural disc.

In making these remarks the Examiner is ignoring the language beginning at line 38 of column 4 which indicates that this prosthetic device is intended to react as a natural disc does.

Also it is further stated at the end of column 4 that some of the springs are in compression while others may be in expansion, again so that the prosthetic device mimics a natural disc.

Accordingly this prosthetic device is basically seeking a position of rest of neither compression nor tension. How then could this prosthetic device be “configured for continuously urging said screw receiving elements at opposite ends together for thereby providing continuous compressive loading on bone graph material disposed between the vertebral elements”. The Beer et al. device is intended to be used in substitution of a disc, not as a device for continuously urging compressive loading on a bone graph between vertebral elements as specifically claimed. The Beer et al prosthetic structure is not intended to be used in combination with a bone graph, but rather is intended to be used in substitution thereof, or in substitution of a natural disc.

In addition, the claim language of claim 1 further calls for “means for permitting the distance between said screw receiving elements at opposite ends to be shortened but preventing said distance from increasing”. No such structure is shown in the reference.

While this is a feature of the prior art, nevertheless, it is a necessary element in the combination of elements of the present invention as claimed in claim 1. Therefore, in order to reject Applicant’s claim 1 under 35 U.S.C. 102 (b), this element must also be disclosed and considered an essential part of the claimed invention and it is not.

Accordingly, for all of the foregoing reasons, Applicant’s claim 1 clearly defines over and above the Beer et al. structure.

The same reasoning also holds true with regard to the rejection of claims 1 - 2, 5 - 6, 8, 10 - 11, 14 - 15 and 17, under 35 U.S.C. 102 (e) as being anticipated by Sevrain. Once again, the Sevrain structure is a prosthetic substitute and is not designed nor capable of continuously urging the screw receiving elements at opposite ends together for thereby providing continuous compressive loading on bone graft material disposed between the vertebral elements, and in addition, does not provide means for permitting the distance between the screw receiving elements at opposite ends to be shortened but to prevent distance from increasing.

The Examiner points to the language in this reference at lines 60 - 65, in column 5. This language merely points out that the prosthetic device of Sevrain is in a “floating” position or is in a “rest” position, in the same manner as the Beer et al. prosthetic device. Such devices at rest do not and are not capable of “continuously urging said screw receiving elements at opposite ends together for thereby providing continuous compressive loading on bone graft material disposed between the vertebral elements”. In fact, the teachings of these references indicate that these prosthetic devices are not even intended to be used in such a manner. In addition, Sevrain does not disclose any “means for preventing a distance between said screw receiving elements at opposite ends to be shortened but preventing said distance from increasing”.

Again, this is a prosthetic substitute which provides no means for providing the claimed structure of the present invention. For the Examiner to state that these prior art devices “could provide a compressive force” has no weight and no meaning to those of ordinary skill in the art under the present circumstances. These devices are always intended to seek a position of rest and have nothing to do and cannot provide continuous compressive forces on a bone graft.

Regarding the rejection of claims 3 - 4 and 12 - 13, under 35 U.S.C. 103 (a) as being unpatentable over Sevrain in view of Richelsoph et al. The specific elements of claims 3 - 4 and 12 - 13 are not considered per se to be inventive. However, when combined with the inventive features of the claims upon which they depend, it is considered that these combinations constitute patentable subject matter.

Lastly, the Examiner rejects claims 7 and 16 under 35 U.S.C. 103 (a) as being unpatentable over Sevrain in view of Serbousek et al. In this regard the Examiner points out that Serbousek et al. discloses a torque device (134/128) that causes torque to the spring.

Once again, Applicant admits that the provision of tensioning devices for springs is not new per se. However, when combined with the novel features upon which these claims depend, it is considered that the total combination is nonobvious and provides patentable subject matter.

Accordingly, it is respectfully submitted that claim 1 in fact, clearly and adequately defines invention over and above the cited art which is not shown or even suggested in the prior art. Accordingly, reconsideration with formal Notice of Allowance is requested.

Respectfully submitted,

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